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ABSTRACT

This policy analysis contains a historical base, a conceptual framework, and an evaluation of policies related to the implementation of program standards in vocational education. It is intended for policymakers at all levels, professional organizations, and vocational teachers responsible for carrying out the actual implementation of program standards policy. Chapter 1 is an introduction that provides definitions, a historical review of standards in education, and a description of recent efforts to improve educational standards. Chapter 2 sets forth the problem: at what level of government--federal, state, or local--should program standards in vocational education be administered? In chapter 3 six criteria are presented for use in judging the three leadership options: curriculum flexibility, evaluation use, articulation, program access, policy administration, and compliance. Chapter 4 contains descriptions of how a policy requiring vocational education to base its program on a set of standards might look at each level. In chapter 5 each of the three policy alternatives is analyzed in terms of the six criteria. Pros and cons are listed for each option. Chapter 6 recommends a state-sponsored standards policy as the most efficacious in enhancing excellence in vocational education and offers reasons for this policy choice. (YLB)

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Information Series No. 292

TOWARD EXCELLENCE IN SECONDARY VOCATIONAL EDUCATION: IMPLEMENTING STANDARDS

Tim L. Wentling
University of Illinois
Urbana-Champaign, Illinois

The National Center for Research in Vocational Education
The Ohio State University
1960 Kenny Road
Columbus, Ohio 43210-1090

1985

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Program Information Office
National Center for Research
in Vocational Education
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1960 Kenny Road
Columbus, Ohio 43210-1090

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FOREWORD

Toward Excellence in Secondary Vocational Education: Implementing Standards addresses one of the difficult questions of our time: Who has responsibility for implementing standards in vocational education? This policy analysis paper discusses problems of compliance and administration at the local, State, and Federal levels.

This publication is one of seven produced by the Information Systems Division of the National Center. This series of information analysis papers should be of interest to all vocational and adult educators, including Federal and State agency personnel, teacher educators, researchers, administrators, teachers, and support staff. Legislators and administrators can use this publication to evaluate policy alternatives and to devise strategies for implementing them.

The profession is indebted to Dr. Tim L. Wentling for an analytical and probing discussion of difficult issues. Dr. Wentling is Professor and Director of the Office of Vocational Education Research, Department of Vocational and Technical Education, College of Education, at the University of Illinois. He has written two textbooks in the area of educational evaluation and has served in a variety of capacities in academic, State, and Federal positions.

Dr. Robert C. Harris, Advisor to the Executive Vice-President, Smith Research Center, Indiana University; Dr. Wilma P. Griffin, Head, Division of Home Economics, University of Texas; Floyd McKinney, Senior Research Specialist, and Jay Smink, Senior Research Specialist, of the National Center for Research in Vocational Education, contributed to the development of the paper through their reviews of the manuscript. Staff on the project included Dr. William Hull, Senior Research Specialist, Dr. Oscar Potter, Graduate Research Associate, James Belcher, Program Associate, and John Tennant, Graduate Research Associate. Janet Ray served as word processor operator for this manuscript. Editorial assistance was provided by Janet Kiplinger and Judy Balogh of Editorial Services at the National Center.

Robert E. Taylor
Executive Director
The National Center for Research
in Vocational Education

EXECUTIVE SUMMARY

The question of educational standards has been of great concern since the inception of public schooling. Throughout the years, attempts to develop standards have concentrated on how to develop standards rather than on standards implementation. This policy paper addresses the issue of standards implementation by providing an overview of past efforts, presenting a list of criteria for evaluating policy alternatives, and recommending a locus of responsibility for implementing standards in vocational education.

Establishing standards for programs in vocational education should enhance the understanding of social and technical issues. Legislators and administrators at the local, State, and Federal levels can gain a better sense of vocational education's achievements when standards are implemented. Such information can be extremely valuable in making policy decisions about the use of resources in resolving social, political, and economic problems. At the same time, this publication should be of interest to professional associations and teachers who are called upon to implement any program standards policy.

The central concern of this policy analysis is the question, At what level of government should program standards in vocational education be administered? Three primary levels of governmental control are identified. These include (1) the Federal level or the U.S. Department of Education, (2) the State level or the State board that retains authority for administering Federal vocational funds, and (3) the local level or local educational agencies.

Six criteria are presented as a means of judging the three leadership options—local, State, or Federal—for implementing policy.

- Curriculum flexibility
- Evaluation use
- Articulation
- Program access
- Policy administration
- Compliance

Each leadership option is reviewed using each of the six criteria. Pros and cons are listed for each option. A state-sponsored standards policy is recommended as the most efficacious in enhancing excellence in vocational education for the following reasons:

- Although the State policy may not allow total curriculum flexibility, it should be able to permit local districts to modify the standards to meet their particular needs. The state-level policy will be able to coordinate the curriculum of all vocational programs so that

students will be leaving school with a "core" of knowledge and skills. In the end, a local policy may be overly responsive to local curriculum needs, and a Federal policy might be too restrictive when the standards are in need of modification.

- If the State modifies its evaluation systems to reflect the program standards and similar types of evaluation information are being collected from all vocational programs, it is likely that the data will be useful not only to State decision makers but also to local administrators and educators. Evaluation use may be enhanced at different aggregate levels when the variability across districts is reduced.

- Articulation would be positively affected by a state-level policy. Secondary and postsecondary programs would benefit from a common curriculum based on shared standards. A local-level policy runs the risk of having too much variability across districts, and it would not be able to improve articulation with other postsecondary programs in the State. A Federal policy would have little chance of increasing the efficiency and efficacy of articulation. Its distance from classroom or lab is too great.

- A state-level standards policy has a good chance of ensuring that special needs students are not negatively affected by the implementation of program standards. It would be better able than local districts to ensure that these students have equal access to programs. Once again, a Federal policy, although likely to enhance program access, would only exacerbate the belief that the Federal Government is too visible in the schools.

- The most efficient and effective level at which to administer a program standards policy is at the State level. A Federal-level policy would be mired in bureaucracy and thwarted by understaffing. A local-level policy, which may have the least amount of bureaucracy, would still, however, result in a variation of policy administration practices.

- Compliance with a standards policy would likely be higher at the State level than at any of the other levels of implementation. If the State develops a reasonable set of regulations that minimizes the administrative burden at the local level, compliance with the policy may be increased. Individuals at the local level might tend not to comply with a local policy to the extent they would if the State requires them to carry out a standard policy. Although a Federal policy would ensure compliance, the distance and local and State resistance to Federal intervention moderate the degree of compliance.

INTRODUCTION

This policy analysis contains a historical base, a conceptual framework, and an evaluation of policies related to the implementation of program standards in vocational education.

Whereas the issue of educational standards happens to be a subject of great concern today as a result of several critical reports on the status of American education, the issue of declining educational standards has been the subject of heated debate since the inception of public schooling. Throughout the years, various attempts have been made to develop academic standards in an effort to promote educational excellence. Most discussions about standards, however, have concentrated on how they are chosen or developed and the validity of their measurement rather than on how program standards should be implemented.

This policy analysis hopes to bridge this gap by providing an overview of past efforts to develop educational standards. It also presents a list of criteria that may be used to evaluate policy alternatives, to examine leadership options, and to discuss them in light of the criteria. Finally, a recommendation will be made.

Numerous books, articles, and reports focusing on the subject of standards and discussions with individuals involved in the research and development of vocational education program standards have provided the essential data from which this policy analysis was developed.

Although there is much to be said about how standards may be developed and validated, this paper, in light of its purpose and space restrictions, will concentrate on the implementation aspect of educational standards only. Though a large number of sources were used in writing this analysis, they nevertheless represent only a fraction of the information available on the topic of standards and standardization in education.

Since this paper is a policy analysis, it is primarily intended for individuals at the policy-making level who may be legislators, Federal administrators, state-level administrators, or local school personnel. At the same time, however, this paper should be of interest to professional organizations such as the American Vocational Association as well as to vocational teachers who are directly reponsible for carrying out the actual implementation of any program standards policy.

Theoretical Context

As defined by the *Random House Dictionary*, a *standard* "is an object considered by an authority or by general consent as a basis of comparison; an approved model." Standards are also defined in the dictionary as "those morals, ethics, habits, etc., established by authority, custom, or an individual, as acceptable." Standards play an important role in providing a basis for reference or comparison.

ACKNOWLEDGEMENT: The author is sincerely grateful to Dr. Hallie S. Preskill for her contributions of ideas and insightful reactions to this policy paper. Dr. Preskill is director of Evaluation Consultants Ltd., Minneapolis, Minnesota.

At times, the words *criterion* and *standard* have been used interchangeably. Although the concepts are related, the two words mean different things.

Definitions

Criterion is defined as a statement that describes or designates a variable of instruction or an attribute that is required. For example, a criterion might be achievement on a particular test.

Standard is defined as a specific level, either quantitative or qualitative, that has been set for a criterion. For example, a standard might be a specific score required on a particular test.

Policy analysis is defined as a form of applied research carried out to acquire a deeper understanding of sociotechnical issues and to bring about better solutions. According to Quade (1982), policy analysis searches for feasible courses of action, generating information and marshaling evidence of the benefits and other consequences that would follow their adoption and implementation.

Raths and Preskill (1982) provide the following example to explain the difference in the two concepts: "If height were a criterion for becoming a teacher, a standard might be defined as 60 inches tall. If a candidate met this standard, then he would be assessed as meeting the criterion" (p. 310). Without criteria, it is most difficult to measure the attainment of standards.

Looking at history, we can see that standards have governed human behavior. Customs and common rules gave rise to standards for family behavior, speech, picture writing and phonetic symbols, religion, laws, and the division of time. Another early example of standards is the development of a system for weights and measures. Particularly influential was the Egyptian system, which was eventually adopted by the Romans and then by all European nations (Harriman 1928). The scientific standards that were later developed have guided all scientific inquiry ever since.

In the early part of the 20th century, standards were thought to be the means of controlling production and human behavior. Scientific management, originated by Frederick Taylor in 1911, became extremely influential in the way business, industry, and eventually, education were conducted. In attempts to mass-produce goods and services, management ideology focused its concern on the output of the system (Wise 1978). A steadfast proponent of scientific management, Franklin Bobbitt, an instructor at the University of Chicago in 1913, believed that in every fully developed organization certain principles of management could be applied universally. These principles included developing qualitative and quantitative standards for the product and reassessing the product for revision of the standards at each developmental stage (Callahan 1962). Bobbitt was convinced that without definite standards for a product, the work of the organization could not even be started.

Historical Uses of Standards in Education

For almost 200 years, American educators have struggled with the problem of standards. Schools have been criticized for failing to establish clear and consistent academic standards for students. Occasionally, the public has criticized educators for setting unrealistically high academic goals; more often, however, schools have been chastized for demanding too little of their students. The following review of American education in three historical periods will provide the reader with a frame of reference for better understanding recent educational standards efforts.

The Common School Movement—1830-1880

During the first decades of the 19th century, Americans supported and attended a

wide variety of schools organized along class, religious, or ethnic lines. The existing public schools were built and supervised by lay people and were often funded by lotteries. Usually, teachers who instructed the students were untrained. By 1850, however, the institution known as "the common school," conceived by Horace Mann and other social promoters, had emerged with great vivacity. The common school movement was intended to provide children with a basic elementary school education that would prepare them for employment and political involvement. It was to be publicly supported through taxes, controlled politically, open to all classes and types of youth, and expected to "produce literate, numerate, and moral citizens" (Tyack, Kirst, and Hansot 1980, p. 256). Tyack, Kirst, and Hansot explain that the unifying principle for the common school movement was the "basic system of similar beliefs and a common vision of their institutional embodiment" (ibid., p. 257). This movement may thus be interpreted as public education's first step toward standardizing education for America's youth.

The Progressive Era—1890-1920

Historically, this period in American history represents a dramatic social revolution influenced largely by two groups of progressive individuals. Although both groups were headed by middle-class professionals and were rooted in the cities, the two differed greatly in their vision of society and the educational needs of children. One group, comprised of business-oriented individuals, had become alarmed by what was perceived to be the financial wastefulness of schools. The members pointed to the low yield of school products measured in cost accounting terms. This group also deplored what it saw as the impractical curriculum that failed to serve the requirement of business and industry. Its motivation was the desire to eliminate urban disorder through scientific expertise and social control. A leading advocate of vocational education and social efficiency, Charles Prosser, suggested that schools be revamped to serve the Nation's economic system (Lucas 1984).

The other group, known as the humanitarian reformers, had as its goal the reduction of human misery through social reform (Wirth 1972). People such as Jane Addams, leader of the settlement house movement, were also alarmed at the wastefulness, but it was the waste of human potential as represented in the "lives of slum dwellers eroded by poverty, vice, crime, [and] despair" (ibid., pp. 67-68). Eventually, both of these value orientations converged as vocational education was brought into the schools.

By this time, public education had grown across the country and the public high school was emerging. Compulsory schooling and child labor laws enacted between 1852 and 1910 greatly increased attendance in the public schools. These initial standards for attendance also ensured that a greater variety of students would be in school. This diversity soon led to the establishment of a differentiated curriculum that continues today. It is because of this differentiation that schools have operated and continued to do so under several different sets of standards for curriculum (Resnick and Resnick 1983). In 1860, there were 321 high schools in this country, but by 1900, there were over 20,000 high schools (Cordasco 1976). The goals of the new high school, however, were somewhat different from those of the common school movement. Whereas the common school movement focused on basic education, the emphasis now became preparing students expressly to perform specific roles in life. It was believed that schools should sort and train the young according to their probable destinies.

As a result of the great industrial revolution, thousands of people migrated from rural areas into the cities. One effect of this mass migration was a movement to centralize the schools and make them more uniform. The one-room school houses were merged into larger township or regional schools, and increasingly, control of the schools was

taken out of the hands of politicians and laypersons and put into the hands of school administrators trained at the universities.

These administrators were a product of the scientific management school of administration; with them they brought the "scientific" principles being expounded in business and industry. The influence of college at this point is apparent in a statement made by Franklin Bobbitt when he suggested that "education is a shaping process as much as the manufacture of steel rails" (Callahan 1962, p. 81) and that success was based on having a high standard that could adjust and control all the necessary processes. Ellwood Cubberly, dean of the School of Education at Stanford University and contemporary of Bobbitt, also promoted the notion of scientific management in the schools. He explained that the purpose of the scientific management movement was to create standards so that the efficiency of schools could be determined and communicated to the public in an understandable language. Cubberly suggested that "this would elevate the work of education from where it was, based upon guess-work and personal opinion to scientific accuracy" (ibid., p. 98). Standards were thought to be the means for identifying weak teachers, failing students, and inefficient schools.

With booming school enrollments, large building programs, and the cult of efficiency, the schools were encouraged to justify their performance in quantitative ways (Resnick and Resnick 1983). It was during this time that the field of testing emerged and flourished. Tests and examinations were the major means of setting and maintaining education standards. Certification and accreditation agencies also grew and actively set educational standards. Additionally, it should be remembered that this was also the age of experts and that a grass roots involvement in education was strongly rejected. Krug (1969) writes, "This restless quest for standardization, classification, inspection, and accreditation reflected several kinds of conditions and tendencies" (p. 159). The educational community was besieged with commissions and associations attempting to influence the direction of schooling (e.g., the Report of the Committee of Ten in 1893 and the Cardinal Principles of Secondary Education in 1918), and Krug suggests that to many this quest may have "represented a sincere desire to improve the quality of schooling by every possible means" (ibid.). It should be noted, however, that this quest also included an effort to emulate science in accordance with the scientific spirit of the age. Many believed (and still do) that being scientific is tantamount to possessing truth.

With the momentum gained by the social efficiency movement, educators in the academic subject areas were called upon to justify their employment. Courses offered in the high schools were to meet the needs of the masses of pupils, not just the college bound (Krug 1969). This controversy led to the formation of several regional and national associations that helped to standardize the length of the school year, the class period, preparation of teachers, graduation units, class size, libraries, and school facilities (Cordasco 1976). These associations included the New England Association of Colleges and Secondary Schools in 1879, the Middle Atlantic States Association of Secondary Schools and Colleges in 1892, and the North Central Association in 1894. In addition, organizations such as the National Education Association (NEA) sponsored the formation of several subject matter associations such as the National Council for Teachers of Mathematics and the Council for Teachers of English.

By 1920, in response to public pressure, standards that were to guide teachers in the classroom were developed for many high school subject areas. These associations and National commissions became the foremost agents for developing educational standards. This approach to improving education continues to be used today, as is evidenced by the recent commissions on education (e.g., National Commission on Excellence in Education, National Research Council, Twentieth

Century Fund Task Force on Federal Elementary and Secondary Education Policy, and Education Commission of the States). A recent study found that over 240 state-level commissions and study groups have offered suggestions on how to improve the public school (Fiske 1984).

The Age of Sputnik and Beyond—1957-1984

Few will forget that in 1957 the Union of Soviet Socialist Republics beat the United States into space. Attention was once again focused on the public schools. Conant (1959) undertook a study of the high school and concluded in his well-known book *The American High School Today* that the math and science curricula of secondary education were severely deficient. These subjects were considered vital to the race with the Soviet Union for global power (Spring 1976). Attempting to breathe life into an undemanding curriculum, Conant's recommendations included a prescription for subjects students needed to study. Not only did his study lead to an increased Federal role in education and a National curriculum, but his recommendations became the standards by which schools began to compare themselves. In striving to meet Conant's suggested standards, schooling continued to become even more uniform.

In the early 1970s, Americans' confidence in public education again began to fade, along with their confidence in most public institutions. Lapointe and Koffler (1982) suggest that the public's "confidence in education had waned to such an extent that the community at large was no longer willing to sit back and leave the system in the exclusive hands of the educators" (p. 5). After a lapse of nearly 80 years, the lay public and politicians reclaimed control of education. No longer were educators considered to be the experts in determining the most appropriate curriculum and learning environment.

The recent educational reform movement has frequently been compared to the Sputnik era curriculum reform efforts. Edward Fiske (1984) notes distinct difference, however: although both efforts resulted from a perceived threat to the Nation, the first was military, the current one, economic.

Recent Efforts to Improve Educational Standards

Competency-based Education

In the early 1970s, a "systems approach" to program design and development, initially developed by the military, influenced the adoption of competency-based education as a primary means of raising educational standards.

If any area of education has been particularly influenced by competency-based learning, it is the area of vocational education because "competency-based vocational education is viewed as a systematic approach to instruction, aimed at accountability, based on job-derived standards and supported by a feedback mechanism" (Hirst 1977, p. 32). It has received wide support in the field. One of the perceived strengths of competency-based education and testing is its relationship to certification and licensing (Chalupsky, Phillips-Jones, and Danoff 1981). For this reason, many vocational programs have developed and implemented competency-based curricula throughout the country. However, Chalupsky, Phillips-Jones, and Danoff (1981) suggest that one area that has not received enough attention is the setting of proficiency standards and the translation of these standards into specific cutoff scores.

Amidst increasing criticism about the effectiveness of schooling in the mid-1970s, the competency-based education movement adopted the word "minimum" and became the Minimum Competency Testing (MCT) movement. Resnick and Resnick (1982) suggest that the MCT movement was America's response to the question of standards maintenance and improvement. Within

approximately 5 years, 39 States had developed legislation requiring students to pass minimum competency tests prior to graduation from high school (Lapointe and Koffler 1982). Though the competency movement has been thought by many to increase educational excellence by requiring high school students to have certain skills, critics assert that its potential for upgrading educational standards is limited. Resnick and Resnick (1983) explain that the "minimum competency test can be viewed as an effort to proffer educational enfranchisement to the least able students by allowing them to earn credentials based on a minimal performance. . . . The competency testing movement severely limits its potential for upgrading educational standards" (p. 179). In addition, because minimum competencies have been found to restrict the range of what is taught, the standard of education is perceived to be lowered.

Competency-based teacher education (CBTE) also grew rapidly during the early 1970s, again in response to growing criticism about the colleges' and universities' teacher preparation programs. Through CBTE, efforts were made to identify the specific skills teachers were to have in order to be effective in the classroom. After competencies were identified, instruction and assessment procedures were developed to measure the competencies (Dick, Watson, and Kaufman 1981). As Wendel (1982) has pointed out, "The movement, with its underlying constructs of mastery learning, criteria-referenced assessment, self-pacing, and field experiences, was expected to bring about a massive reform of teacher education" (p. 28). Research findings that suggest teachers trained by the CBTE method might have a higher degree of confidence in their abilities since they assess themselves against standards as given by criterion tests and checklists lend support to competency-based teacher education programs (Smith, Stillwell, and Bissell 1982). As will be seen in the next section, the teacher competency education movement soon influenced the teacher certification process.

Certification

Defined as the process of legal sanction that authorizes one to perform specific services in the schools (Gardner and Palmer 1982), teacher certification in the late 19th century was primarily a local concern. But as education became more centralized and expansive, teachers were required to take county-administered proficiency exams. Although the medical, engineering, dental, and architectural professions began developing their own National standards, the National Education Association (NEA), still in its infancy, failed to establish comparable certification standards. It has been suggested that the reason for not developing such standards was related to the fact that many teachers taught part-time, were poorly paid, and were mostly women. Further, the profession carried little prestige (ibid.). Upon discovery that the county exams varied greatly, States began to develop their own certification standards. As of 1982, the State board of education, or its delegates, in 30 States controls the teacher certification process. In 16 additional States, a standards board, or commission, which sits in an advisory role to the State board of education, is reponsible for the certification of teachers. In the four remaining States, the certification process is handled by independent agencies.

Recent efforts to raise educational standards through improving the teacher certification process have resulted in the phenomenal growth of the teacher competency testing enterprise (Flippo and Foster 1984). Though begun in the southern States by State legislatures and boards of education, teacher competency testing spread rapidly throughout the country between 1978 and 1983. By 1984, 36 States had developed legislation requiring teachers to pass competency tests (Smith 1984). Although the competency tests vary from State to State, about half of them are using commercially developed standardized tests such as the National Teacher Examination or the California Achievement Test (Level 19). The other half have contracted with testing companies to

develop competency tests for their State's particular certification needs (Flippo and Foster 1984). It should be emphasized here that the impetus for teacher competency testing came not from educators as might have been the case in the earlier part of this century, but from lay persons and politicians. This movement exemplifies the country's lack of confidence in the education community. Though the public's support of teacher competency testing appears to be strong, the results of several research studies have failed to show any direct relationship between written tests and on-the-job performance (Smith 1984). Therefore, the validity of the tests is considered to be highly questionable. Nevertheless, Flippo and Foster (1984) suggest that if teacher competency tests are valid and reliable, the results could be used to develop, reevaluate, or revise preservice and inservice teacher education. Believing that this view is overly optimistic, some critics continue to assert that teacher competency tests are "gatekeepers" (Gallegos 1984) that splinter the profession "when solidarity is needed" (Smith 1984).

In vocational education, the authority to certify vocational teachers in most States lies with the State board of vocational education instead of the certification board operated by the State department of education. By retaining the authority to approve or reject vocational and technical teachers by approving or withholding reimbursement of their salaries, the certification process can be used as a tool for promoting conformity (Evans and Herr 1978). Depending on State and institutional requirements, most vocational teachers complete a prescribed course of study in their subject matter. Some of the occupational areas such as health occupations, trade and industrial, and distributive education require new teachers to have had work experience in their field in addition to the course work, certificate, or degree. A few States have used occupational competency examinations in an attempt to ensure competence of teachers (ibid.).

Accreditation

Accreditation may be defined as the private, voluntary process through which an institution is recognized as having met certain criteria and standards (Gardner and Palmer 1982). As a peer review process, it is often seen as both developmental and regulatory. Since the granting of accreditation is supposed to ensure a standard of quality, it has been said that "the house of accreditation rests on the standards" (Gubser in Tom 1980, p. 113).

The premier agency for accrediting teacher education programs has been the National Council for Accreditation of Teacher Education (NCATE), founded in 1968. In terms of 4-year institutions, NCATE is the largest specialized accrediting agency in the country (Gubser 1980). The standards it developed have been regarded as optimum conditions toward which institutions can strive to reach exemplary goals (ibid.). When NCATE conducts an evaluation, its efforts rest on assessing whether or not the teacher preparation program meets the established standards. If it does not, it may not be accredited.

One of the major criticisms of the NCATE standards is that the validity of the standards has never been established. That is, whether or not teacher preparation programs that rate high on NCATE standards produce better teachers than programs that rate low on an NCATE evaluation has never been tested (ibid.). Other shortcomings of the NCATE standards are as follows:

- The boundaries of the standards are indeterminate.
- The standards are vaguely written.
- The standards lack operational definitions.
- There are too many standards.

- The standards lack criteria by which they can be assessed.

Tom (1980) takes special issue with the third shortcoming because of its implications for the evaluation process. He states that "since operational definitions are missing, judgment of whether a standard is met is determined basically by the extent to which practices within an institution are consistent with the implicit operational definitions possessed by visiting team members and council members" (p. 114).

In vocational education, little has been written about accreditation either at the institution or program level (Stoodley 1983). With a few exceptions, most vocational education programs are accredited as part of the secondary school institution accreditation process. With the exception of the New England and Southern Associations of Schools and Colleges, vocational-technical programs are accredited as part of the secondary institution accreditation process. Depending on the type of institution and the degree granted, the accreditation process is carried out by a variety of commissions. The Commission on Occupational Education of the Southern Association of Schools and Colleges has the authority to accredit noncollegiate and nondegree institutions that are both secondary and postsecondary, though it cannot accredit a secondary school that awards a high school diploma.

In addition, the Commission on Vocational, Technical, and Career Institutions in the New England Association of Schools and Colleges may accredit both degree and nondegree programs in secondary and postsecondary institutions (ibid.). These commissions publish standards that indicate the items upon which the commission will base its findings once the accreditation process is complete. This process usually involves self-study and a site visit. The commissions' standards are also intended to assist an institution in improving the quality of its education.

Program Standards in Vocational Education

In the last 8 years, major efforts toward the development of program standards in vocational education have been made. According to Cory and Rokisek (1982), pressure for such standards has typically emanated from—

- an increased demand for accountability in education,
- the need to justify the existence of certain programs in a time of declining enrollments,
- modifications in State certification requirements,
- the perceived inadequacy of current accreditation guidelines and instruments,
- an increased involvement of State departments conducting on-site reviews of vocational teacher education preparation programs.

Reviewers of the recent educational studies generally agree that vocational education was virtually unaddressed by the commissions, both in their investigations and their recommendations. Owens and Crohn (1983) lament that the commissions' neglect of vocational education may be due, in part, to the fact that there is no generally accepted set of criteria for judging excellent vocational education programs and their outcomes. Writing along the same lines a few years earlier, Darcy (1979) strongly recommends the development of evaluative standards with which vocational outcomes may be assessed. Even without such standards, however, vocational educators have been prompted to think about the ways in which vocational education may contribute to improving education. Their concern in participating in the excellence movement has primarily manifested itself in efforts to develop and improve their programs' criteria and standards.

To assist vocational education in its efforts, the U.S. Department of Education (USED) for the last several years has been awarding contracts to each of the vocational program areas to develop or improve program standards. In response to a recommendation made by the American Industrial Arts Association in 1978, for example, standards in industrial education have been developed by teachers, State and local supervisors, and teacher educators. The stated purpose of the standards is to "serve as models for schools, districts, and states that wish to develop, adopt, or refine standards for the improvement of their industrial arts programs" (Dugger et al. 1981).

Another example of USED interest in standards is the development of qualitative programs standards in business education. These standards were funded by the Office of Vocational and Adult Education (OVAE) as part of its "commitment to excellence in education" (U.S. Department of Education 1983). The utilization of all standards, however, has been stipulated as purely voluntary. In 1977, standards in agricultural education were published, again supported by funds from USED, to serve as a reference to which all agricultural/agribusiness education can be compared (Iowa State University 1977). Between 1979 and 1981, program standards for home economics education were developed for evaluating existing programs or for designing or revising local and State standards (Griffin and Clayton 1982).

THE PROBLEM

From the historical review and the description of recent practices presented in the previous section, it is obvious that educational standards have been important to the support and delivery of programs. The setting and control of standards are viewed as critical aspects of maintaining high-quality educational offerings.

It is also obvious that the vocational education enterprise has invested efforts to improve its program through the development of program standards. This is evidenced by the funding awards made by the U.S. Department of Education and many States to develop program standards within each of the vocational program areas.

With program standards already developed or near completion, vocational educators are faced with decisions on how to use these standards. The paramount question in addressing these decisions is "Who should be in control of standards?" In education, we have many examples of controlling agencies and groups. Governmental agencies, professionals associations, accrediting groups, advisory groups, and individual schools and their staffs have roles in the implementation and enforcement of standards.

In reviewing the history of governance in vocational education, it is easily concluded that Federal, State, and local agencies play important roles in the control of vocational offerings. The important question about *who* should control standards can be limited to these three levels of governmental control. This is not to say that other groups, organizations, or agencies should not be involved. It simply identifies government as a primary or key leader in the process of implementing standards.

Problem Statement

The central concern of this policy analysis is this: *At what level of government should program standards in vocational education be administered?* Three primary levels of governmental control are identified. They are as follows:

- The Federal level or the U.S. Department of Education
- The state level or the State board that retains authority for administering Federal vocational funds
- The local level or local educational agencies

It is acknowledged that regional forms of government exist within some States, but they are not included in this analysis.

Assumptions

This policy is based upon several main assumptions. The first is that government will play a leading role in the implementation of standards. Even though professional associations, consumer groups, teachers, and others will influence the implementation of standards in important ways, the leadership will rest with government.

Second, it is assumed that standards exist or will exist for vocational programs. The focus of this analysis has not been on policies related to development. Instead, emphasis has been placed on policies dealing with the implementation of standards.

Third, policies related to standards are based upon the assumption that consensus over the selection of goals for vocational education may or may not exist. Most believe that for standards to be used effectively, there should be a consensus of opinion about what vocational education should be or should do.

Fourth, we must be cautious not to allow the issues of educational excellence and rising standards to take precedence over the education equity gains that have been made in the last 20 years. Some critics have suggested that new curriculum standards impose a new stratification system in the schools that limits students with special needs from attaining the same level of education as other students.

CRITERIA FOR JUDGING LEADERSHIP OPTIONS

The process for deciding upon a policy involves the assessment of various courses of action, or policy alternatives. In order to determine which alternative would be most desirable, six criteria are presented that will be used to judge the three leadership options.

1. Curriculum flexibility
2. Evaluation use
3. Articulation
4. Program access
5. Policy administration
6. Compliance

Curriculum Flexibility

What is the probability that the standards policy will respond to technological and social changes in the field?

The policymaker is concerned with the issue that curriculum-based standards may have a tendency to become stagnant and not be responsive to the outside community. As employment needs change along with student needs and interests, it is possible that the standards may lose relevance. In looking at the policy alternatives, the policymaker wants to know at which level of implementation schools are best able to ensure that the standards remain flexible and evolutionary as demands in the field change.

Evaluation Use

What is the probability that the standards policy will contribute to the use of evaluation information for the purpose of improving programs?

Research has shown that vocational administrators rely on evaluation data as a means of making decisions about program improvement. Additional research has found that certain factors influence the use of evaluation information. Two of these factors are the personal and professional characteristics of the user of evaluation data and the communication patterns within and between organizations mandating and implementing the policy. Regarding this criterion, the policymaker wants to know which leadership alternative will enable schools to make the best use of evaluation data, which leadership alternative comes closest to providing the means for using evaluation information commonly for upgrading and improving vocational education programs.

Articulation

What is the probability that the standards policy will enhance program articulation?

Vocational educators emphasize the importance of making the transition from secondary vocational education to post-secondary education as smooth as possible. Also, the need to move geographically may be important to some students. This means that programs and curricula must

be coordinated and that communication between the institutions must be open and continuous. The policymaker must ask how articulation will be affected by the various policy alternatives and which policy will provide the best chances for articulation to continue and improve.

Program Access

What is the probability the standards policy will enhance the access of special needs students to vocational programs?

This criterion asks the policymaker to assess the various policy alternatives in relation to the policy's affect on the ability of all students to participate in vocational programs. In assessing the leadership alternatives, the policymaker asks if the policy limits the access of special needs students and encourages creaming. The Vocational Education Act of 1963 clearly states that special needs students should have equal access to vocational education programs. Would there be a violation of the act if the policy were implemented at one level and not another?

Policy Administration

What is the probability that the standards policy will be effectively and efficiently administered?

One view of successful policy implementation is that smoothly functioning routines must be established. This involves being able to coordinate existing programs and policies and to manage effectively the individuals expected to carry out the policy mandate. For routines to be established, the policy must have the support of those responsible for implementation. The policymaker wants to know at which level of implementation the chances are greatest for the policy to be supported and administered in a way that will lead to the achievement of the policy's goals.

Compliance

What is the probability that administrators and educators will comply with the standards policy?

Without administrative and educator support in using the standards, there will not be sufficient compliance. Without compliance, it is impossible for a policy to be implemented successfully. With this criterion, the policymaker seeks to determine at which level of implementation the administrators and teachers would be most willing and able to carry out the policy mandate.

LEADERSHIP OPTIONS FOR IMPLEMENTING STANDARDS

A policy requiring vocational education to base its programs on a set of standards may be developed at one of three governmental levels. The following is a description of how a policy at each of the levels might look.

Local District Policy

A policy developed at the local level would involve the adoption of an already existing set of program standards, perhaps National or State standards developed in the individual program areas, or would involve the design of a local set of standards that were closely related to the perceived needs of the local school and business community. The school boards and local administration would have input into how the policy should be written and who would be responsible for its implementation. Total control over the implementation of the standards would be in the hands of the school boards and the administration. Neither the State nor Federal Government would have the authority to intervene in the selection of particular standards or in the ways the policy was or was not being implemented.

> **Sample Local Policy Statement:** All vocational and technical programs that are delivered under the purview of Metropolis School District #182 will base their curriculum and instruction on the standards adopted by the Board of Education on February 14, 1985. Subsequent review and evaluation will be based on the same standards.

State-level Policy

If the State were to adopt a policy that required all vocational programs to base their curricula on a set of standards, it could adopt the National standards. However, the State would need to make a few changes to comply with individual State certification or safety requirements, and would then require local districts to adopt them for their use. Local school boards could be responsible for the implementation of the State standards according to the requirements stipulated in the resultant policy regulations. Professional vocational education groups in the State may play a role in helping local district design activities that would assist teachers and administrators in using the standards. Teacher education institutions would have the responsibility and opportunity of integrating the program standards into their preservice and inservice teacher education programs.

> **Sample State Policy Statement:** All vocational and technical education programs within the State shall ensure that their curriculum and instruction are consistent with the program standards presented in bulletin No. 12 and reflected in section 23 of the State School Code. Any planned departures from these standards will be considered on a special request basis as outlined in bulletin No. 12.

Federal-level Policy

A policy developed and implemented at the National level would be a broad mandate

requiring vocational education programs to implement program standards according to a set of regulations devised by a government office. It would most likely be prescriptive in the processes and procedures it required, but permissive in the discretion it allowed the States in deciding how the policy would be put into operation. In order for the policy's goals to be met, effective provisions for their implementation would have to be established. Though some States and local schools might have some flexibility in how the policy is implemented, the Federal Government would be able to exercise its authority by withholding funds if it thought there were a lack of compliance. Therefore, Federal control over vocational education programs would be greatest if a policy were implemented at this level.

Sample Federal Policy Statement: Each State receiving Federal funds appropriated by Federally sponsored vocational education shall ensure that each program supported by such funds is in compliance with implementation and evaluation requirements for such standards as specified in the rules and regulations of the act.

ANALYSIS OF SELECTED LEADERSHIP ROLES FOR IMPLEMENTING STANDARDS

In this chapter, each of the three policy alternatives is analyzed in terms of the six criteria outlined in chapter 3. Judgments are made about each alternative within the major criteria categories. These judgments are based on history, the literature, the experience of the author, and the input of respected authorities who have reviewed the alternatives.

Curriculum Flexibility

Local District Policy

- A local policy would ensure that students are leaving school with more uniform knowledge and skills designed to make them more marketable in a particular business community.
- The community may perceive that vocational education is interested in promoting educational excellence by developing and implementing a local policy. This credibility at the local level could translate into continued or improved financial support.
- A local policy has a better chance of gaining and maintaining teacher support and ownership of standards than does a State or Federal policy.
- A locally developed and controlled policy would make competency-based education easier to implement since local policy may be tied to competency-based teacher education.
- A local policy would allow for flexible standards and be able to respond to new local market needs or developments in the field. Less bureaucracy at the local level would increase opportunities for change.

State-level Policy

- A State policy requiring the implementation of standards would ensure conformity of the vocational curriculum throughout the State while also allowing local districts to modify standards to meet their individual needs.
- Uniform standards implemented at the State level could damage effective vocational programs that are "inner directed" as well as those that have developed their own distinctive goals and norms—practices that may be inhibited by pressure to conform to externally imposed norms.
- A state-level policy may not take into consideration variations in need that exist in most States. That is, urban and rural differences often have curriculum ramifications.
- Although boundaries would be set on the scope of learning as implied by the range of standards, teachers may tend to regard the standards less as a minimum than might be the case with a locally developed and implemented policy. A State policy might allow the teacher to be seen more as a facilitator of learning than as a mere technician.

- The State's teacher education programs would be better able to integrate the program standards into their preservice education programs, thereby increasing the compatibility of what future teachers learn with what is taught in local vocational programs.

- State-level policy may not be as able to respond to the needed departures from the standards as would local policy.

Federal-level Policy

- A Federal policy that requires the implementation of program standards would convey the message that vocational education is doing what it can to contribute to educational curriculum reform and improvement.

- A standards policy controlled at this level would have the drawback of not being able to react to change in the field as quickly as a local or State policy would be able to do.

- A Federal policy would not be able to take into account the individual needs of States and local districts.

Evaluation Use

Local District Policy

- Evaluation information is more valid and useful if it is tied directly to a local standards policy. If evaluation results reflect local realities, the data may be used more often by administrators and teachers in making decisions to improve programs.

- A local standards policy may facilitate the implementation of a self-evaluation system.

- Evaluation use may increase because the data would more likely include contextual program factors.

- If evaluations are to be based on program standards, these definitions and criteria for judging programs must be established. Operational definitions of the standards are more likely to be developed at the local and State level than at the Federal level.

State-level Policy

- Self-evaluation data collected by local districts and supplied to the State offices will have limited use to State decision makers since the data would reflect a great deal of variability across districts. These data would not be conducive to aggregation for state-level information needs.

- If the State implemented a program standards policy, it could attach an evaluation requirement that, if complied with, could provide data that could be used to compare vocational programs across the State.

- The States could enforce some form of external control over the local district to make sure that the evaluation information is used to improve programs.

Federal-level Policy

- If valid and reliable evaluation data can be collected at the local level and aggregated at the State level, it might be of use to Federal policymakers. However, previous attempts at this have been unsuccessful.

Articulation

Local District Policy

- A local standards policy would enhance the articulation of secondary vocational graduates to postsecondary vocational programs since local policy implementors would be better able to coordinate programs with postsecondary institutions in nearby communities.

State-level Policy

- Articulation between secondary and postsecondary institutions would be more effective under a state-level standards policy. This would allow local schools to be attuned not only to postsecondary schools in the nearby communities but also throughout the State.

Federal-level Policy

- A standards policy implemented at this level would have the least effect on improving articulation between secondary and postsecondary vocational education programs.

Program Access

Local District Policy

- Access by special needs students to vocational programs could be limited by the implementation of a local standards policy that might favor students who are more likely to meet the standards and the policy's goals.

- A local policy might also establish standards that are too low.

State-level Policy

- Access to vocational programs by special needs students would be greater under a state-level policy than under a local policy. The State would be able to invoke penalties on districts that did not comply with the State's equal access and opportunity legislation.

Federal-level Policy

- The most effective way to ensure access to vocational programs for all students is through a Federal standards policy related to law or regulations. Previous Federal legislation guaranteed the right of all students to participate in vocational education. Should the States or local district be found negligent in this area, the Federal Government would have the right to impose penalties such as the withholding of funds.

Administration

Local District Policy

- Research is beginning to show that school boards are having negative reactions to the massive State education reforms currently being enacted by State legislatures throughout the country. A local policy of program standards would give boards the needed sense of control over a district's curriculum and program. There is a growing fear that the educational reform efforts will encounter a severe backlash that will dilute many of the "improvements" being legislated if school boards continue to claim they are being overregulated.

- If the policy were seen as a local versus Federal concern, and the district

was able to establish its own means for administering the policy, the policy may be implemented in a smoother, more routine fashion. It would be able to conform to the administrative styles of the district and would likely result in less resistance from those responsible for implementation.

- Administration of local policy involves less bureaucracy and makes ongoing commmunication between the policymakers and policy implementors more feasible since the distance between the two is less at the local level than at any other level of government.

- How to implement the policy and its regulations would be more interpretable at the local level of implementation. Communication patterns between the policymakers (school board) and the implementors (teachers and administrators) would most likely be stronger within the local district than would the communications between any two levels of government.

- Too much leverage might be given to the district if a local policy were developed. The success of the program standards policy would tend to be too dependent on individual school board and administrator styles and personalities.

State-level Policy

- The governance and operation of vocational education programs are the responsibilities of the States and localities.

- State policies can be more easily administered than Federal policies since there is less bureaucracy and physical distance between the State and local agencies than the distance between the Federal Government and local districts.

- Regulations developed for the standards policy may be ambiguous and not easily interpretable by the local districts responsible for meeting the policy's goals.

Federal-level Policy

- A Federal policy would probably be unsatisfactory because the administration of any standards policy is contingent on the customs, culture, and economy of the local districts and States.

- A policy mandated at this level is the most difficult to administer. In addition to the many layers of bureaucracy, rarely are a policy's regulations written specifically enough for a State or local agency to implement without further interpretation. Since States would most likely interpret regulations differently from one another, the policy would result in a wide variation of implementation practices.

Compliance

Local District Policy

- A standards policy implemented at this level may result in the least amount of compliance. Because local implementors may perceive there to be little, if any, negative consequences for nonimplementation, administrators and teachers could become lax in carrying out the policy mandate.

- Compliance with the local policy could be curtailed if the district did

not have adequate resources with which to implement the policy.

- The involvement of local personnel in establishing a standards policy might result in local ownership and corresponding high compliance.

State-level Policy

- A standards policy implemented by the State could provide funds for implementing the policy in school districts.

- The State would be in the best position for making sure that local districts complied with the policy. The relationship between the local districts and the State is much closer than that between local districts and the Federal Government. If schools had trouble implementing the standards policy, the State could have its technical people work with the districts. In that the State had the responsibility to govern schools, it would also have the power to invoke penalties if districts were not in compliance.

- State pressure to comply may have a detrimental effect on local self-evaluation and improvement efforts.

Federal-level Policy

- If administrator and educator support for a standards policy is absent in a local district and a policy were to mandate the use of program standards in vocational education, a Federal policy would ensure a higher degree of compliance than a local policy. Noncompliance with a Federal policy may be perceived as more threatening than noncompliance with a locally developed policy.

CONCLUSION AND DISCUSSION

This chapter assumes that program standards in vocational education are a certainty, thus the conclusion of this policy analysis—that state-level policy for implementing vocational program standards is the most attractive alternative. The reasons for this policy choice are as follows:

1. Although the State policy may not allow total curriculum flexibility, it should be able to permit local districts to modify the standards to meet their particular needs. The state-level policy will be able to coordinate the curriculum of all vocational programs so that students will be leaving school with a "core" of knowledge and skills. The State will be seen as making a major effort to improve vocational education and will most likely increase its credibility with the public. In the end, a local policy may be overly responsive to just local curriculum needs and a Federal policy might be too restrictive when the standards are in need of modification. In addition, a Federal policy may not be able to reflect individual, local, and State curriculum needs.

2. If the State modifies its evaluation systems to reflect the program standards and similar types of evaluation information are being collected from all vocational programs, it is likely that the data will be useful not only to State decision makers but also to local administrators and educators. Evaluation use may be enhanced at different aggregate levels when the variability across districts is reduced. A state-level standards policy provides the means for reducing this variation.

3. Articulation would be positively affected by a state-level policy. Secondary and postsecondary programs would benefit from a common curriculum based on shared standards. Postsecondary programs would anticipate the knowledge and skills secondary school graduates would have (students from within the State), and secondary vocational educators would know what expectations postsecondary schools had of their students. A local-level policy runs the risk of having too much variability across districts, and though it might enhance articulation between a local district and nearby postsecondary vocational institutions, it would not be able to improve articulation with other postsecondary programs in the State. A Federal policy would have little chance of increasing the efficiency and efficacy of articulation. Its distance from the classroom or lab is too great.

4. A state-level standards policy has a good chance of ensuring that special needs students are not negatively affected by the implementation of program standards. State-level policy would be better able than local districts to ensure that these students have equal access to programs and are not discriminated against in favor of students who would be more likely to meet the standards. If necessary, the State could use its authority and impose penalties on those districts found to be showing preferential treatment to the most conveniently educable students. Also, States can provide technical assistance and

possibly funding to support implementation. States already have in place a system for monitoring compliance with civil rights standards. This could be complementary to a State program standards policy. Once again, a Federal policy, although likely to enhance program access, would only exacerbate the belief that the Federal Government is too visible in the schools.

5. The most efficient and effective level at which to administer a program standards policy is at the State level since it is readily equipped to put the policy into action. It has the staff, resources, and responsibility to ensure quality vocational education in all its secondary and postsecondary programs. A federal-level policy would be mired with bureaucracy and understaffing and the regulations would likely lead to a wide variation in administration practices. A local-level policy, which may have the least amount of bureaucracy, would still, however, result in a variation of policy administration practices which would minimize the State's ability to ensure excellent vocational education throughout the State.

6. Compliance with a standards policy would most likely be higher at the State level than at any of the other levels of implementation. If the State develops a reasonable set of regulations that minimizes the administrative burden at the local level, compliance with the policy may be increased. In addition, if the State consciously involves educators, business leaders, teacher educators, administrators, and school board members in the planning of the policy and then involves these individuals in the implementation of it, compliance will most likely generate less resistance. The State would also be able to assist local programs by providing resources to implement the policy. Individuals at the local level might tend not to comply with a local policy to the extent that they would if the State required them to carry out a standards policy. Although a Federal policy would ensure compliance, the distance, and local and State resistance to Federal intervention, moderates the degree of compliance.

For these reasons, a state-sponsored standards policy is viewed as most efficacious in enhancing the excellence of vocational education in the United States.

Even though the state-level policy appears to be the optimal choice in the analysis described herein, it should not be assumed that the Federal Government or local education agencies are unimportant to implementation. Quite the contrary, there will be a need for Federal leadership and technical assistance in helping States select and validate standards, develop mechanisms for incorporating the standards into local programs, and design or adapt evaluation systems to monitor the achievement of standards.

Local education agency personnel will play a critical role in ensuring that State standards meet the needs of their clientele and communities. They will also be critical links in the standards incorporation process. They may be the ones who assume responsibility for curriculum modification and implementation of standards. Professional organizations will also play important roles in the implementation of standards. Many of these organizations have already been heavily involved in the development of standards. This involvement and commitment can and should be extended to the implementation stages and curriculum change process.

The implementation of program standards in vocational education has high potential for maintaining a relevant curriculum and ensuring the excellence of vocational programs. It will be important to

acquire sufficient resources and time for the standards incorporation process and to build upon the experiences of States, organizations, and individuals who have implemented program standards.

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